

(19) 日本国特許庁 (J P)

(12) 実用新案公報 (Y 2)

(11) 実用新案出願公告番号

実公平7-5087

(24) (44) 公告日 平成7年(1995)2月8日

(51) Int.Cl.<sup>6</sup>

B 6 5 H 35/07

識別記号

庁内整理番号

F I

技術表示箇所

R 9037-3F

請求項の数1 (全 10 頁)

(21) 出願番号 実願昭63-148209

(22) 出願日 昭和63年(1988)11月14日

(65) 公開番号 実開平2-69670

(43) 公開日 平成2年(1990)5月28日

(71) 出願人 999999999

エルム工業株式会社

東京都葛飾区西新小岩4丁目21番22号

(72) 考案者 柳瀬 芳之

東京都葛飾区西新小岩4丁目21番22号 エ

ルム工業株式会社内

(74) 代理人 弁理士 杉山 泰三

審査官 神崎 孝之

(56) 参考文献 特開 昭63-37071 (J P, A)

実開 昭56-36675 (J P, U)

実開 昭55-11971 (J P, U)

特公 昭48-4431 (J P, B 1)

(54) 【考案の名称】 接着テープ用電動カッター

1

【実用新案登録請求の範囲】

【請求項1】 回動自在且つ着脱自在に取付けられた接着テープの装填ドラムと、ドラムに装填された接着テープを送出する電動送り部と、送出された分の接着テープを切り落す電動カッター部とで構成され且つ同カッター部に電動可動刃と固定刃とを備えた接着テープ用電動カッターに於て、電動送り部の前面に後面が開放された扁平筐67を装備し、この扁平筐67の前壁の上半分個所に接着テープ5の吐出口68を開設すると共に当該扁平筐67の後面の下半分にバネ板製後面版69を張着して同下半分を閉塞し、この後面版69と扁平筐67の前壁との間の上半分に水平個所の下辺が切刃70とされた「形状の前後揺動可能な固定刃71を同じく下半分に上辺が切刃72とされた上下移動可能な可動刃73を、固定刃71の垂直個所71' が可動刃73の後面に重合した状態および可動刃73の左右移動が

2

左右両側に設けられたガイド部材74により阻止される状態として装入し、また後面版69の上辺の両側に押圧アーム75を上向きに突設し、この押圧アーム75の前方への押出力と扁平筐67の上側両隅部に後方向きとして突設された懸架ピン67' の案内によって固定刃71の上方が常に前方に押し出されているようにし、更に可動刃71の下部の中央個所に横長のガイド孔76を後面版69の中央個所に縦向きの長方形孔77を開設することによってカッター装置78を構成し、このカッター装置78を上記の装填部47に引掛バネ79と引掛孔80の係合および係止爪81と係止孔82の係合により抜去自在に嵌着して上記のガイドピン52をガイド孔76に長方形孔77を介して遊嵌し、ガイドピン52の上昇で可動刃73が切断機能を果すようにすると共に後面版69と扁平筐67の前壁との間の上方個所に横に長い下面開放の空間104を形成し、この空間104に潤滑油が吸蔵さ

10

れたフェルト製パット105を抜落不能として装填し、このパット105には可動刃73の切刃72が同可動刃73のガイドピン52による上昇によって当接するようにし、更に吐出口68の下辺部の上面および外側面に非粘着性にすぐれた合成樹脂、ゴム等材料製の被覆シート108を被着し、この被着シート108の外表面に縦縞状の凹凸109を、また同外表面において吐出口68の下辺部の外側面に被着された部分の中央個所の外面に鼻柱状の隆起部110を夫々設けたことを特徴とする接着テープ用電動カッター。

【考案の詳細な説明】

(産業上の利用分野)

本考案は接着テープ用電動カッターに関するものである。

(従来の技術)

粘着テープを支持するドラムと、上記粘着テープを後記の切断刃の方向へ送り出す送りドラムと、上記送りドラムからベルトで駆動されかつ該ドラムにより送り出される粘着テープ案内する案内ロールと、該案内ロールからベルトで駆動され上記ロールより送り出されるテープを張った状態で捕えると共に切断されたテープを支持する一対のスイッチロールと、上記案内ロールとスイッチロール間に位置しこれらの両ロール間に張設された粘着テープを電磁力で可動して切断する切断刃を主として具備し、上記スイッチロールを導電体で形成して上記送りドラムを駆動するモーターを含む電気回路にモーターの起動スイッチとして組み込み、上記スイッチロールから上記テープを取り除いて両スイッチロールを接触通電させて上記モーターを起動させるように構成すると共に可動側の切断刃に掃除片を設けたテープ自動切断装置は特公昭48-4431号公報などによって公知となっている。

(考案が解決しようとする問題点)

然しながら、この構造のものは切断刃の作動時における相互の接合を確実にするための格別な手段を有することがないので切断刃に掃除片が設けられていてもそのみではテープのカットを正確且つ円滑に行うことができず、また、上記のスイッチロールの前面にはカットされたテープの吐出口を備えることが無いので例えばテープを長くカットするとカットされたテープが腰の折れた状態で下方のスイッチロールにへばりつき、このためにこれを指先で摘んで剥す作業が必要となったり、これを回避するためにスイッチロールの前面に吐出口を設けても、カットされたテープがその下辺部の外側面などに不用意にへばりつく傾向があって前記同様の使い勝手の悪さを解消し得ないなどの問題点があった。

(問題点を解決するための手段)

本考案は回転自在且つ着脱自在に取付けられた接着テープの装填ドラムと、ドラムに装填された接着テープを送出する電動送り部と、送出された分の接着テープを切り落す電動カッター部とで構成され且つ同カッター部に電動可動刃と固定刃とを備えた接着テープ用電動カッター

に於て、電動送り部の前面に後面が開放された扁平筐67を装備し、この扁平筐67の前壁の上半分個所に接着テープ5の吐出口68を開設すると共に当該扁平筐67の後面の下半分にバネ板製後面版69を張着して同下半分を閉塞し、この後面版69と扁平筐67の前壁との間の上半分に水平個所の下辺が切刃70とされた形状の前後揺動可能な固定刃71を同じく下半分に上辺が切刃72とされた上下移動可能な可動刃73を、固定刃71の垂直個所71'が可動刃73の後面に重合した状態および可動刃73の左右移動が左右両側に設けられたガイド部材74により阻止される状態として装入し、また後面版69の上辺の両側に押圧アーム75を上向きに突設し、この押圧アーム75の前方への押出力と扁平筐67の上側両隅部に後方向きとして突設された懸架ピン67'の案内によって固定刃71の上方が常に前方に押し出されているようにし、更に可動刃71の下部の中央個所に横長のガイド孔76を後面版69の中央個所に縦向きの長方形孔77を開設することによってカッター装置78を構成し、このカッター装置78を上記の装填部47に引掛バネ79と引掛孔80の係合および係止爪81と係止孔82の係合により抜去自在に嵌着して上記のガイドピン52をガイド孔76に長方形孔77を介して遊嵌し、ガイドピン52の上昇で可動刃73が切断機能を果たするようにすると共に後面版69と扁平筐67の前壁との間の上方個所に横に長い下面開放の空間104を形成し、この空間104に潤滑油が吸蔵されたフェルト製パット105を抜落不能として装填し、このパット105には可動刃73の切刃72が同可動刃73のガイドピン52による上昇によって当接するようにし、更に吐出口68の下辺部の上面および外側面に非粘着性にすぐれた合成樹脂、ゴム等材料製の被覆シート108を被着し、この被着シート108の外表面に縦縞状の凹凸109を、また同外表面において吐出口68の下辺部の外側面に被着された部分の中央個所の外面に鼻柱状の隆起部110を夫々設けたことを特徴とする接着テープ用電動カッター提供することによってこのような問題点を解決しようとするものである。

(実施例)

図に示す実施例は座盤1の上面に於ける前辺に前側立壁2を同じく中央個所の両側に左側立壁3および右側立壁3'を、これ等左右両側立壁3,3'の前辺縁が前側立壁2の後側に接する状態として夫々設けると共に左右両側立壁3,3'の間に後下りの中間底4を張設することにより接着テープ5の装填凹部6を形成し、この装填凹部6の前壁に接着テープ5の送出口7を開設し、この送出口7の後方に外周に環状の凹溝8の多数本が周設された前側および後側送りロール9、10を、当該後側送りロール10が僅かに高い位置とされた配置および前後両側送りロール9、10が互に凹溝8、8内に嵌入された状態となして回転自在に軸承し、これ等前後両側送りロール9、10の中心軸を右側立壁3'の外側に貫出させて各貫出端に従動歯車11、12を固定し、これ等両従動歯車11、12を

右側立壁3'の外側に遊転自在に軸承した伝達歯車13に噛み合わせると共に上記の中間底4の下側に送り用モータ14を装備し、この送り用モータ14の回転軸15に駆動ピニオン16を固定して当該駆動ピニオン16と上記の伝達歯車13とを中間歯車17、18、19、20を介して連結し、また前側立壁2の上辺縁に後方向きの張出壁21を突設し、この張出壁21に縦軸22を上下に貫出した状態で回転自在および上下動可能に支承して上端に押圧強度調節用ツマミ23を同じく下端に両端が下方に折曲された横板24を夫々固着すると共に上記の前側送りロール9の上方に外周に環状の凹溝25の多数本が周設され且つ当該凹溝25に前側送りロール9が嵌入された押着ロール26を、左右両側立壁3、3'に開設された縦向きの長孔27を利用して上下動自在に軸承し、この押着ロール26の中心軸28の両端寄り箇所を上記の横板24の両端折曲部29、29'の下端で押圧するようにし、また縦軸22に於て張出壁21の下面と横板24の上面と間の箇所に同縦軸22の押下用パネ30を捲装し、更に同縦軸22に於て張出壁21の上より上の箇所に横

向ピン31を貫通して当該横向ピン31の両側を縦軸12の軸孔に於ける切縁の上面に上記の押下用パネ30の作用力により圧接させ、同切縁の上面に高所部32および低所部33を設け高所部32に横向ピン31の両側が圧接する時には横板24の両端折曲部29、29'が押着ロール26を少ない状態で押下し同じく低所部33の時には多い状態で押下するようにすると共に上記左右両側立壁3、3'の後側の隅角縁に斜めの深い切込溝35、35'を切設し、当該切込溝35、35'に巻芯5'に巻かれた接着テープ5の装填ドラム36に於ける中心軸37の両端寄り部を抜去可能な落し込みにより遊転自在に嵌着し、また切込溝35、35'の外側に長方形の左右両側板パネ39、39'を配しこれ等左右両側板パネ39、39'の下端部を左右両側立壁3、3'にリベット40により止着して同板パネ39、39'の上端部と切込溝35、35'の底端部とを対向させると共に当該上端部に装填ドラム36の中心軸37の両端ピボット状部41、41'が嵌着するピボット状軸受42、42'と同ピボット状軸受42、42'にピボット状部41、41'を嵌着時および抜去時に案内する傾斜面43、44とを設け、更に前側立壁2に於て接着テープ5の送出口7のまわりに囲い枠46を突設して後述するカッター装置78の装填部47を形成し、この装填部47の後側に上下揺動板48を配して其の基端を前側立壁2に支軸49により軸承し同じく先端に下方に押し下げる牽引パネ50を掛しすると共に当該上下揺動板48に於ける先端寄り箇所の下側縁にカム51を同じく上側縁箇所に前方向きのガイドピン52を立設し、このガイドピン52の先端を上記の装填部47内に縦向きの長孔53を介して貫出させ、また前側立壁2の下方箇所の後側に周辺にクランクピン55が立設された大径平歯車56を取付板57を利用して軸着すると共に取付板57にカッター作動用モータ59を装着し、このカッター作動用モータ59の回転軸60にピニオン61を固着して当該ピニオン61と上記の大径平歯車56

とを中間歯車62、63、64、65を介して連結し、カッター作動用モータ59の回転によってクランクピン55とカム51とが係合してガイドピン52を上下動するようにし、更にこれとは別個に上記の装填部47内に嵌合する後面が開放された扁平筐67を構成し、この扁平筐67の前壁の上半分個所に接着テープ5の吐出口68を開設すると共に当該吐出口68の下辺部の上面および外側面に非粘着性にすぐれた合成樹脂、ゴム等材料製の被覆シート108を被着し、この被覆シート108の外表面に縦縞状の凹凸109を、また同外表面において吐出口68の下辺部の外側面に被着された部分の中央箇所の外面に鼻柱状の隆起部110を夫々設け、また扁平筐67の後面の下半分を閉塞し、この後面版69と扁平筐67の前壁との間の上半分に水平個所の下辺が切刃70とされた▽形状の前後揺動可能な固定刃71を同じく下半分に上辺が切刃72とされた上下移動可能な可動刃73を、固定刃71の垂直箇所71'が可動刃73の後面に重合した状態および可動刃73の左右移動が左右両側に設けられたガイド部材74により阻止される状態として装入すると共に後面版69の上辺の両側に押圧アーム75を上向きに突設し、この押圧アーム75の前方への押出力と扁平筐67の上側両隅部に後方向きとして突設された懸架ピン67'の案内によって固定刃71の上方が常に前方に押し出されているようにし、更に可動刃71の下部の中央箇所に横長のガイド孔76を後面版69の中央箇所に縦向きの長方形孔77を開設することによってカッター装置78を構成し、このカッター装置78を上記の装填部47に引掛パネ79と引掛孔80の係合および係止爪81と係止孔82の係合により抜去自在に嵌着して上記のガイドピン52をガイド孔76に長方形孔77を介して遊嵌し、ガイドピン52の上昇で可動刃73が切断機能を果すようにすると共に後面版69と扁平筐67の前壁との間の上方箇所に横に長い下面開放の空間104を形成し、この空間104に潤滑油が吸蔵されたフェルト製パット105を抜落不能として装填し、このパット105には可動刃71の切刃72が同可動刃73のガイドピン52による上昇によって当接するようにする。

更に、右側立壁3'の外側に操作盤83および配線基板84を夫々設けて当該操作盤83にはミリメートル単位設定ボタン85、センチメートル単位設定ボタン86、設定寸法表示カウンター87、設定寸法送り指示ボタン88、自由寸法送りボタン8、自由寸法切断ボタン90を、また配線基板84には抵抗器、コンデンサ、半導体素子などの電気阻止91…を、上記座盤1の後面に電源コード91および電源入り切りスイッチ93を、中間底4の下側にトランス94を夫々装備すると共に上記の送り用モータ14の回転軸15に円周の一点に小さい磁石95が植め込まれた回転板96が固定され、また配線基板84に於て回転板96と対向する箇所にセンサー97を取付け、設定寸法送り指示ボタン88に押し操作を加えて時に送りを開始し、この開始により磁石95がセンサー97の前を通過する回数と設定寸法表示カウンター87に設定表示された数値とが一致した時に送りを停

止すると共にカッター作動用モータ59の作動により可動刃73が切断機能をなし、また自由寸法送りボタン89に押し操作を加えている間中は送りを続け、更に自由寸法切断ボタン89に押し操作を加えた時には可動刃73が切断機能をなす様に電気回路(図示せず)が形成されたものである。

尚、図中99は外筐、100は取付板、101はガイド用リブ、102は接着防止用ギザギザを示す。

(作用)

上記実施例於てミリメートル単位設定ボタン85およびセンチメートル単位設定ボタン86を操作して設定寸法表示カウンター87に所望の数値を表出したのち設定寸法送り指示ボタン88に操作を加え、斯くすると送り用モータ14が回転を開始して回転板96を回転センサー97で磁石95の通過回数を計数すると共に同送り用モータ14が駆動ピニオン16、中間歯車17、18、19、20、伝達歯車13、従動歯車11、12および前後両側送りロール9、10を回転状態として接着テープ5を送り始め、この送りを電気回路が上記の計数による数値と設定寸法表示カウンター87による表出数値との一致で送り用モータ14を停止するまで続け、この停止直後に同電気回路がカッター作動用モータ59の回転を指示してピニオン61、中間歯車62、63、64、65および大径平歯車56を回転状態とし、斯くするとクランクピン55がカム51に当接して上下揺動板48を上方に揺動させ、上方揺動でガイドピン52が可動刃73を上昇して固定刃71とで接着テープ5を切断すると共にクランクピン55がカム51および牽引バネ50と協働して上下揺動板48を下方に揺動させ、この下方揺動でガイドピン52が可動刃73を下降位置に戻すと同時に電気回路がカッター作動モータ59を停止し、仍って設定寸法表示カウンター87に表出した数値に相当する長さのテープ片を切り出す用法、

また、自由寸法送りボタン89に押し操作を加えて送り用モータ14、駆動ピニオン16、中間歯車17、18、19、20、伝達歯車13、従動歯車11、13および前後両側送りロール9、10を回転状態とすることにより接着テープ5を任意に所望の長さまで送り続けたのち自由寸法送りボタン89に対する押し操作を解除して当該接着テープ5の送りを停止すると共に自由寸法切断ボタン90に押し操作を加え、斯くするとカッター作動用モータ59が可動刃73を上下に一往復させて停止し、仍って上記の送り続け操作により送出した自由長さのテープ片を切り出す用法、等に供するようにしたものである。

(考案の効果)

本考案は叙上のように扁平筐67の後面版69と前壁との間の上方箇所に横に長い下面開放の空間104を形成し、この空間104に潤滑油が吸蔵されたフェルト製パット105を抜落不能として装填し、このパット105には可動刃73の切刃72が同可動刃73のガイドピン52による上昇によって当接するようにし、可動刃73の切刃72がカッティング作

動の度にパット106から潤滑油を受け且つ可動刃73に受けた潤滑油の一部を同作動によって固定刃71の切刃70に移すようにしたので、可動刃73の切刃72も固定刃71の切刃70も潤滑油により被覆され上記した接着テープの切縁の切刃70、72への粘着および粘着剤のカスの切刃70、72へのへばりつきを防止し得るは勿論であるが、更に本考案においては後面版69の上辺の両側に押圧アーム75を上向きに突設し、この押圧アーム75の前方への押圧力と扁平筐67の上側両隅部に後方向きとして突設された懸架ピン67'の案内によって固定刃71の上の方が常に前方に押し出されているように構成したので固定刃71は前記のパット106と常時確実な接触状態を維持することができ、テープカットのたびに両者間に臨入する可動刃73はこれによって切刃72への潤滑油の付着を充分に受けることができるのみならず固定刃71への押圧アーム75の前方への押出力によって可動刃73の同固定刃71との接合は極めて密に行われることになり、これによって両切刃70、72によるテープのカットを一層確実に行うことができるものであり、また本考案においては吐出口68の下辺部の上面および外側面に非粘着性にすぐれた合成樹脂、ゴム等材料製の被覆シート108を被着し、この被覆シート108の外表面に縦縞状の凹凸109を、また同外表面において吐出口68の下辺部の外側面に被着された部分の中央箇所の外面に鼻柱状の隆起部110を夫々設けたので、吐出口68から送出された接着テープが同吐出口68の下辺部の上面および外側面に不用意にへばり付くことを被覆シート108の非粘着性、凹凸109および隆起部110の存在によって回避されるものであって、本考案はこれらによって前記の問題点を充分に解決することができる効果を奏するものである。

【図面の簡単な説明】

図は本考案の実施例を示すものであって、第1図は前方斜め上から見た一部切截斜視図、第2図は後方斜め上から見た一部切截斜視図、第3図は一部切截側面図、第4図は一部切截正面図、第5図はカッター装置の表側から見た斜視図、第6図は同じく裏側から見た斜視図、第7図は同じく分解斜視図である。

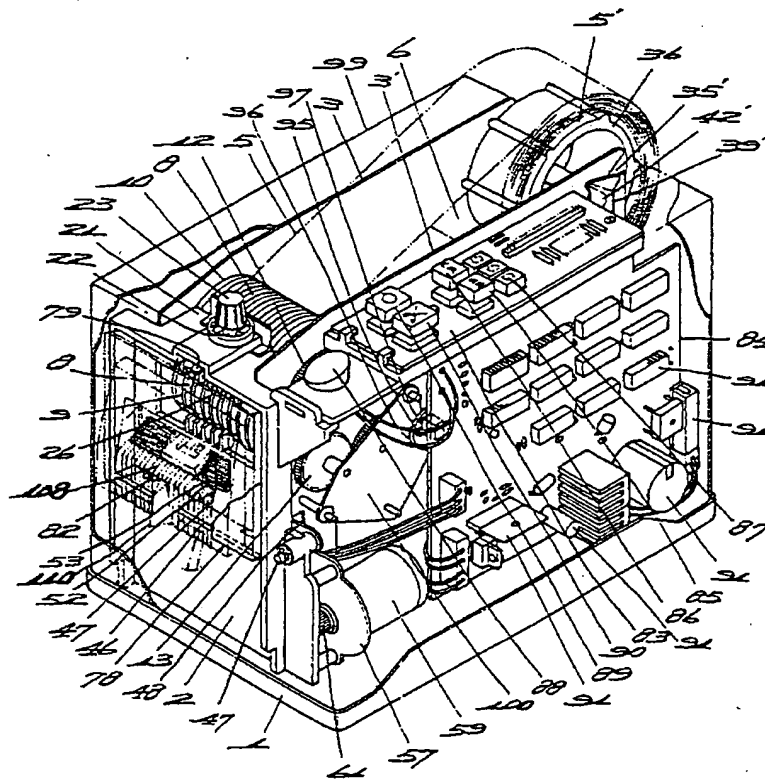
1…座盤、2…前側立壁、3…左側立壁、3'…右側立壁、4…中間底、5…接着テープ、5'…巻芯、6…装填凹部、7…送出口、8…凹溝、9…前側送りロール、10…後側送りロール、11、12…従動歯車、13…伝達歯車、14…送り用モータ、15…回転軸、16…駆動ピニオン、17、18、19、20…中間歯車、21…張出壁、22…縦軸、23…押圧強度調節用ツマミ、24…横板、25…凹溝、26…押着ロール、27…長孔、28…中心軸、29、29'…折曲部、30…押下用バネ、31…横向ピン、32…高所部、33…低所部、35、35'…切込溝、36…装填ドラム、37…中心軸、39、39'…板バネ、40…リベット、41、41'…ピボット状部、42、42'…ピボット状軸受、43、44…傾斜面、46…囲い枠、47…装填部、48…上下揺動板、49…

支軸、50…牽引バネ、51…カム、52…ガイドピン、53…長孔、55…クランクピン、56…大径平歯車、57…取付板、59…カッター作動用モータ、60…回転軸、61…ピニオン、62、63、64、65…中間歯車、67…扁平歯、68…吐出口、69…後面版、70…切刃、71…固定刃、72…切刃、73…可動刃、74…ガイド部材、75…押圧アーム、76…ガイド孔、77…長方形孔、78…カッター装置、79…引掛バネ、80…引掛孔、81…係止爪、82…係止孔、83…操作盤、84…配線基板、85…ミリメートル単位設定ボタン、\*

\* 86…センチメートル単位設定ボタン、87…設定寸法表示カウンター、88…設定寸法送り指示ボタン、89…自由寸法送りボタン、90…自由寸法切断ボタン、91…電気素子、92…電源コード、93…電源入切スイッチ、94…トランス、95…磁石、96…回転板、97…センサー、99…外筐、100…取付板、101…ガイド用リブ、102…ギザギザ、104…空間、105…パット、106…潤滑油補給孔、108…被覆シート、109…凹凸、110…隆起部。

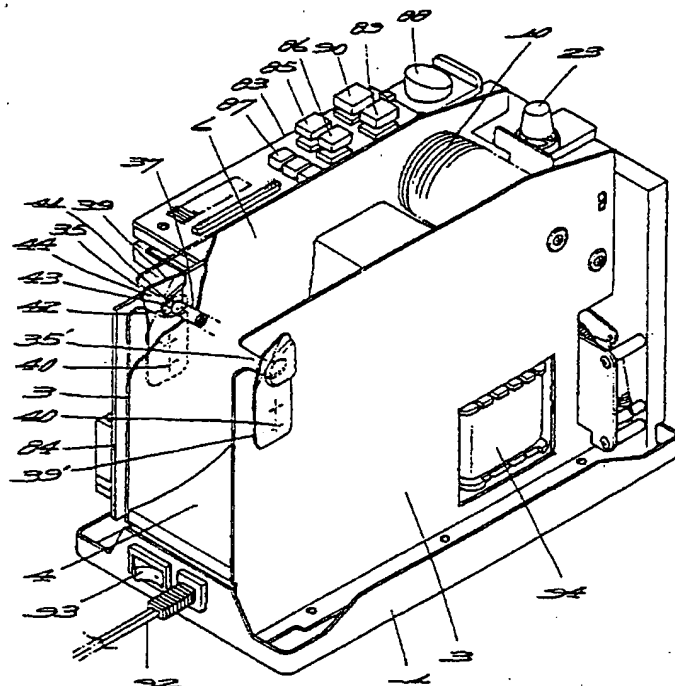
【第1図】

23 … 押圧強度調節用ツマミ  
26 … 押着ロール  
48 … 上下移動板  
68 … カッター装置  
83 … 操作盤  
97 … センサー



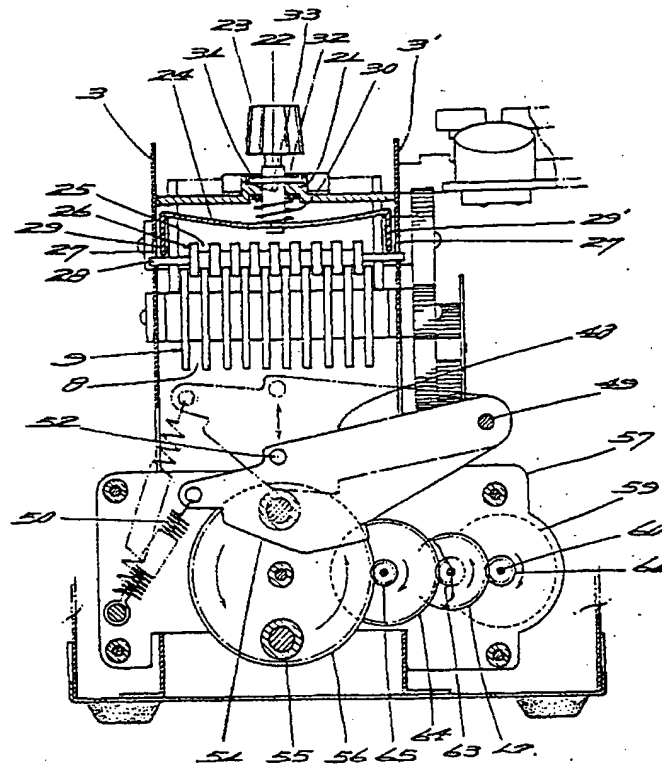
【第2図】

22 ... 押圧強度調節用ツマミ  
 3535' ... 切込溝  
 37 ... 中心軸  
 3939' ... 板バネ

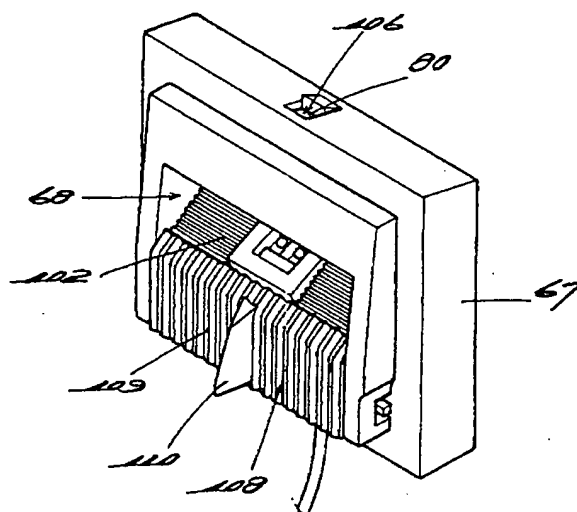


【第4図】

- 23 ... 押圧強度調節用ツマミ  
 28 ... 押着コイル  
 58 ... 上下移動板



【第5図】



(108) ... 被覆シート

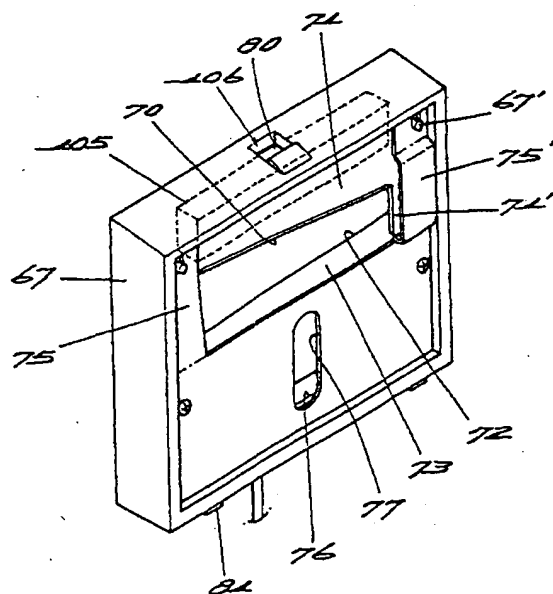
(109) ... 凹凸

(110) ... 隆起部

【第6図】

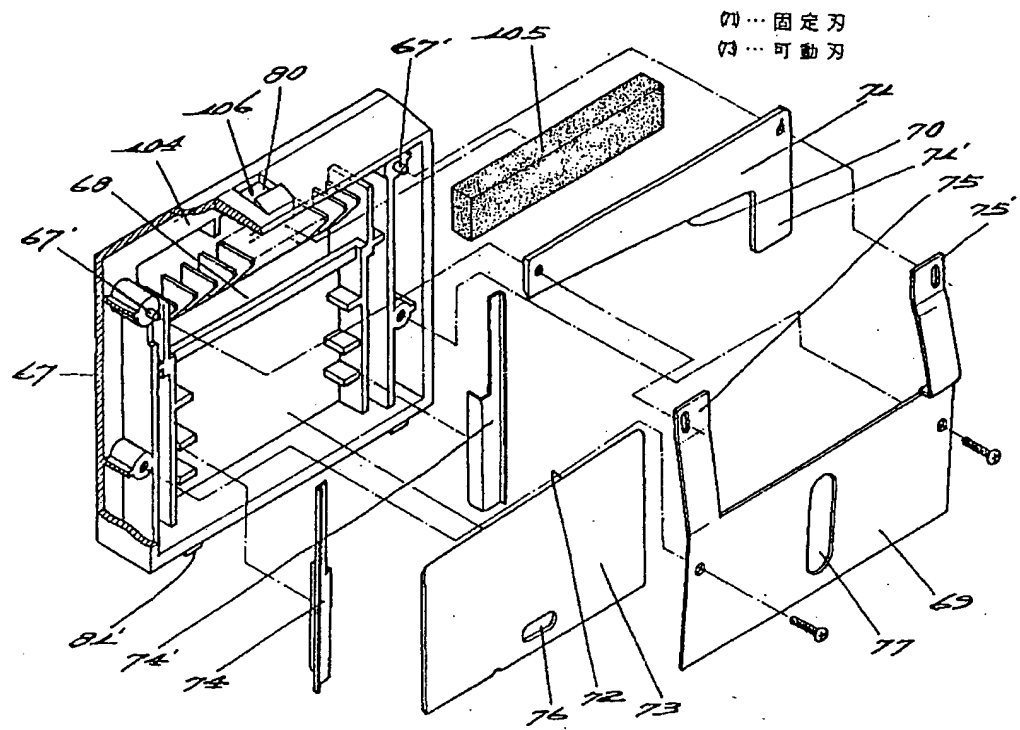
74 ... 固定刃

75 ... 可動刃





【第7図】



\* NOTICES \*

JPO and NCIP are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

CLAIMS

---

[Utility model registration claim]

[Claim 1] The loading drum of the adhesive tape attached free [ rotation ] and free [ attachment and detachment ], and the electric delivery section which sends out the adhesive tape with which the drum was loaded, In the electric cutter for adhesive tape which consisted of the electric cutter sections which cut off the sent-out adhesive tape of a part, and equipped this cutter section with the electric movable cutting edge and the stationary knife While equipping flat \*\* 67 by which the rear face was opened in the front face of the electric delivery section and establishing the delivery 68 of adhesive tape 5 in the upper half part of the front wall of this flat \*\* 67, stretch the rear-face version 69 made from a leaf in the lower half of the rear face of flat \*\* 67 concerned, and this lower half is blockaded. the upper and lower sides to which the top chord was similarly considered as the cutting edge 72 in the lower half in the rockable stationary knife 71 before and after \*\* configuration by which the lower side of a level part was used as the cutting edge 70 in the upper half between this rear-face version 69 and the front wall of flat \*\* 67 -- the movable movable cutting edge 73 It inserts in as a condition prevented by the guide member 74 by which the condition in which vertical part 71' of a stationary knife 71 carried out the polymerization to the rear face of the movable cutting edge 73, and the left right translation of the movable cutting edge 73 were prepared in right-and-left both sides. Moreover, protrude the press arm 75 on the both sides of the top chord of the rear-face version 69 upward, and the upper part of a stationary knife 71 is always ahead extruded with the extrusion force ahead of this press arm 75, and advice of suspension pin 67' which protruded on upside both the corners of flat \*\* 67 as back sense. Furthermore, cutter equipment 78 is constituted by establishing the longitudinal rectangle hole 77 for the oblong guide hole 76 in the central part of the lower part of the movable cutting edge 71 in the central part of the rear-face version 69. Attach this cutter equipment 78 in the above-mentioned loading section 47 free [ extraction ] by engagement of the connection spring 79 and the connection hole 80, and engagement of the stop pawl 81 and the stop hole 82, and the above-mentioned guide pin 52 is fitted loosely into the guide hole 76 through the rectangle hole 77. While the movable cutting edge 73 achieves a cutting function by lifting of a guide pin 52, the space 104 of long underside disconnection is horizontally formed in the upper part part between the rear-face version 69 and the front wall of flat \*\* 67. Fall out and it loads with the putt 105 made from the felt occlusion of the lubricating oil was carried out [ putt ] to this space 104 as impossible. It is made for the cutting edge 72 of the movable cutting edge 73 to contact this putt 105 by lifting by the guide pin 52 of this movable cutting edge 73. Furthermore, the synthetic resin which was excellent in non-adhesiveness at the top face and lateral surface of a lower edge part of a delivery 68, The coat sheets 108 made from an ingredient, such as rubber, are put. To the outside surface of this covering sheet 108 the pinstriped irregularity 109 Moreover, the electric cutter for adhesive tape characterized by forming the columna-nasi-like ridge 110 in the outside surface of the central part of the part put on the lateral surface of the lower edge part of a delivery 68 in this outside surface, respectively.

---

[Translation done.]

\* NOTICES \*

JPO and NCIP are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DETAILED DESCRIPTION

---

[Detailed explanation of a design]

(Field of the invention on industry)

This design is related with the electric cutter for adhesive tape.

(Prior art)

The drum which supports adhesive tape, and the delivery drum which sends out the above-mentioned adhesive tape in the direction of the after-mentioned cutting cutting edge, The advice roll which drives by the belt from the above-mentioned delivery drum, and is sent out on this drum and which carries out adhesive tape advice, The switch roll of the couple which supports the tape cut while catching, where the tape which drives by the belt from this advice roll, and is sent out from the above-mentioned roll is stretched, The cutting cutting edge which carries out movable [ of the adhesive tape which was located between the above-mentioned advice roll and the switch roll, and was stretched among both these rolls ], and cuts it by electromagnetic force is mainly provided. It includes in the electrical circuit containing the motor which forms the above-mentioned switch roll with a conductor, and drives the above-mentioned delivery drum as a start switch of a motor. While constituting so that the above-mentioned tape may be removed from the above-mentioned switch roll, contact energization of both the switch roll may be carried out and the above-mentioned motor may be started, the tape automatic-disconnect equipment which prepared the cleaning piece in the cutting cutting edge of a movable side is well-known by JP,48-4431,B etc.

(Trouble which a design tends to solve)

however — since the thing of this structure does not have a means according to rank for ensuring mutual junction at the time of actuation of a cutting cutting edge Even if the cleaning piece is prepared in the cutting cutting edge, a tape cannot be cut correctly and smoothly only by it. Moreover, the tape cut when the tape was cut for a long time since the front face of the above-mentioned switch roll was not equipped with the delivery of the cut tape for example, sticks to a downward switch roll, after the waist has broken. For this reason, in order the activity which gathers and removes this by the fingertip is needed or to avoid this, even if it establishes a delivery in the front face of a switch roll There was an inclination for the cut tape to stick to the lateral surface of the lower edge part etc. carelessly, and there was a trouble of being unable to cancel badness of said same user-friendliness.

(Means for solving a trouble)

This design is the loading drum of the adhesive tape attached free [ rotation ] and free [ attachment and detachment ], In the electric cutter for adhesive tape which consisted of the electric delivery section which sends out the adhesive tape with which the drum was loaded, and the electric cutter section which cuts off the sent-out adhesive tape of a part, and equipped this cutter section with the electric movable cutting edge and the stationary knife While equipping flat \*\* 67 by which the rear face was opened in the front face of the electric delivery section and establishing the delivery 68 of adhesive tape 5 in the upper half part of the front wall of this flat \*\* 67, stretch the rear-face version 69 made from a leaf in the lower half of the rear face of flat \*\* 67 concerned, and this lower half is blockaded. the upper and lower sides to which the top chord was similarly considered as the cutting edge 72 in the lower half in the rockable stationary knife 71 before and after the configuration by which the lower side of a level part was used as the cutting edge 70 in the upper half between this rear-face version 69 and the front wall of flat \*\* 67 — the movable movable cutting edge 73 It inserts in as a condition prevented by the guide member 74 by which the condition in which vertical part 71' of a stationary knife 71 carried out the polymerization to the rear face of the movable cutting edge 73, and the left right translation of the movable cutting edge 73 were prepared in right-and-left both sides. Moreover, protrude the press arm 75 on the both sides of the top chord of the rear-face version 69 upward, and the upper part of a stationary knife 71 is always ahead extruded with the extrusion force ahead of this press arm 75, and advice of suspension pin 67' which protruded on upside both the corners of flat \*\* 67 as back sense. Furthermore, cutter equipment 78 is constituted by establishing the longitudinal rectangle hole 77 for the

oblong guide hole 76 in the central part of the lower part of the movable cutting edge 71 in the central part of the rear-face version 69. Attach this cutter equipment 78 in the above-mentioned loading section 47 free [ extraction ] by engagement of the connection spring 79 and the connection hole 80, and engagement of the stop pawl 81 and the stop hole 82, and the above-mentioned guide pin 52 is fitted loosely into the guide hole 76 through the rectangle hole 77. While the movable cutting edge 73 achieves a cutting function by lifting of a guide pin 52, the space 104 of long underside disconnection is horizontally formed in the upper part part between the rear-face version 69 and the front wall of flat \*\* 67. Fall out and it loads with the putt 105 made from the felt occlusion of the lubricating oil was carried out [ putt ] to this space 104 as impossible. It is made for the cutting edge 72 of the movable cutting edge 73 to contact this putt 105 by lifting by the guide pin 52 of this movable cutting edge 73. Furthermore, the synthetic resin which was excellent in non-adhesiveness at the top face and lateral surface of a lower edge part of a delivery 68, The coat sheets 108 made from an ingredient, such as rubber, are put. To the outside surface of this covering sheet 108 the pinstriped irregularity 109 Moreover, it is going to solve such a trouble by [ which are characterized by forming the columna-nasi-like ridge 110 in the outside surface of the central part of the part put on the lateral surface of the lower edge part of a delivery 68 in this outside surface, respectively / for adhesive tape ] making electric cutter offer.

(Example)

While the example shown in drawing similarly forms the before side standing wall 2 in the both sides of a central part the front side in the top face of a seat disc 1, respectively as a condition that the right-and-left both-sides standing walls 3, such as this, and the verge before 3' touch the backside [ the before side standing wall 2 ] in the left-hand side standing wall 3 and right-hand side standing wall 3' The loading crevice 6 of adhesive tape 5 is formed by stretching the right-and-left both-sides standing wall 3 and the medium bottom 4 from which it gets down the back between 3'. Before establishing the sending-out opening 7 of adhesive tape 5 to the front wall of this loading crevice 6 and attaching the a large number book of the zonate spot-like concave 8 behind this sending-out opening 7 at a periphery, a side and the backside delivery rolls 9 and 10 The arrangement to which the backside delivery roll 10 concerned was considered as the slightly high location, and the order both-sides delivery rolls 9 and 10 will be in a concave 8 and the condition of having been inserted in eight to \*\*, and will make the bearing of the revolution free to it. Make the medial axis of the order both-sides delivery rolls 9 and 10, such as this, \*\*\*\* on the outside of right-hand side standing wall 3', and collar gears 11 and 12 are fixed to each \*\*\*\*\*. While making it gear with the transfer gearing 13 which made free the bearing of the idling of both the collar gears 11 and 12, such as this, to the outside of right-hand side standing wall 3', the above-mentioned medium bottom 4 bottom is equipped with the motor 14 for delivery. Fix a drive pinion 16 to the revolving shaft 15 of this motor 14 for delivery, and the drive pinion 16 concerned and the above-mentioned transfer gearing 13 are connected through intermediate gears 17, 18, 19, and 20. Moreover, the overhang wall 21 of the back sense is protruded on the top chord edge of the before side standing wall 2. While fixing the side 24 by which it supported free [ a revolution ] and possible [ vertical movement ] where an axis of ordinate 22 is \*\*\*\*(ed) up and down in this overhang wall 21, and ends were similarly caudad bent by the upper bed in the knob 23 for press on-the-strength accommodation in the soffit, respectively The \*\* arrival roll 26 with which the a large number book of the zonate spot-like concave 25 was attached above the before [ the above ] side delivery roll 9 at the periphery, and the before side delivery roll 9 was inserted in the concave 25 concerned The bearing of the vertical movement is made free using the right-and-left both-sides standing wall 3 and the longitudinal long hole 27 established by 3'. The ends approach part of the medial axis 28 of this \*\* arrival roll 26 is pressed in the soffit of the ends bending section 29 of the above-mentioned side 24, and 29'. Moreover, the spring 30 for depressions of this axis of ordinate 22 is \*\*\*\*(ed) in an axis of ordinate 22 in the underside of the overhang wall 21, the top face of a side 24, and the part of a between. Furthermore, penetrate the sideways pin 31 in the part on the upper twist of the overhang wall 21 in this axis of ordinate 22, and the top face of the margo incisalis in the boss of an axis of ordinate 12 is made to carry out the pressure welding of the both sides of the sideways pin 31 concerned according to the applied force of the above-mentioned spring 30 for depressions. When the height section 32 and low \*\*\*\* 33 are formed in the top face of this margo incisalis and the both sides of the sideways pin 31 carry out a pressure welding to the height section 32, while the ends bending section 29 of a side 24 and 29' push the \*\* arrival roll 26 in few condition and are made to carry out a depression in many same condition at the time of low \*\*\*\* 33 The above-mentioned right-and-left both-sides standing wall 3, the deep cut slot 35 slanting on the buttock edge on the backside [ 3' ], and 35' are \*\*\*\*(ed). It attaches free [ idling ]. extraction is possible in the ends approach section of the medial axis 37 in the cut slot 35 concerned and the loading drum 36 of the adhesive tape 5 wound around 35' at winding core 5' -- dropping -- The rectangular right-and-left both-sides flat spring 39 and 39' are allotted to the cut slot 35 and the outside of 35'. The right-and-left both-sides flat springs 39, such as this, and the soffit section of 39' to the right-and-left both-sides standing wall 3 and 3'

moreover, with a rivet 46 while attaching firmly and making this flat spring 39, the upper bed section of 39', and the cut slot 35 and the bottom edge of 35' counter The pivot-like section 41 and the inclined planes 43 and 44 which it shows to 41' at the time of attachment and extraction are established in the upper bed section concerned at the ends pivot-like section 41 of the medial axis 37 of the loading drum 36, the pivot-like bearing 42 which 41' attaches, 42' and the said pivot-like bearing 42, and 42'. Furthermore, the loading section 47 of the cutter equipment 78 which protrudes and mentions the enclosure frame 46 later around the sending-out opening 7 of adhesive tape 5 in the before side standing wall 2 is formed. While hanging the towage spring 50 which arranges the vertical splash plate 48 on the backside [ this loading section 47 ], carries out the bearing of that end face to the before side standing wall 2 by the pivot 49, and is similarly caudad depressed at a head Set up a cam 51 on the bottom edge of the head approach part in the vertical splash plate 48 concerned, and, similarly the guide pin 52 of the front sense is set up in an upside marginal part. The head of this guide pin 52 is made to \*\*\*\* through the longitudinal long hole 53 in the above-mentioned loading section 47. Moreover, while fixing to revolve the major-diameter spur gear 56 with which the crank pin 55 was set up on the outskirts at the backside [ the lower part part of the before side standing wall 2 ] using a tie-down plate 57, a tie-down plate 57 is equipped with the motor 59 for cutter actuation. Fix a pinion 61 to the revolving shaft 60 of this motor 59 for cutter actuation, and the pinion 61 concerned and the above-mentioned major-diameter spur gear 56 are connected with it through intermediate gears 62, 63, 64, and 65. A crank pin 55 and a cam 51 are engaged and a guide pin 52 is made to move up and down by revolution of the motor 59 for cutter actuation. Furthermore, flat \*\* 67 by which the rear face which fits in in the above-mentioned loading section 47 separately from this was opened is constituted. The synthetic resin which was excellent in non-adhesiveness at the top face and lateral surface of a lower edge part of the delivery 68 concerned while establishing the delivery 68 of adhesive tape 5 in the upper half part of the front wall of this flat \*\* 67, The coat sheets 108 made from an ingredient, such as rubber, are put. To the outside surface of this coat sheet 108 the pinstriped irregularity 109 Moreover, the columna-nasi-like ridge 110 is formed in the outside surface of the central part of the part put on the lateral surface of the lower edge part of a delivery 68 in this outside surface, respectively. moreover, the upper and lower sides to which the top chord was similarly considered as the cutting edge 72 in the lower half in the rockable stationary knife 71 before and after \*\* configuration which blockades the lower half of the rear face of flat \*\* 67, and by which the lower side of a level part was used as the cutting edge 70 in the upper half between this rear-face version 69 and the front wall of flat \*\* 67 -- the movable movable cutting edge 73 While the condition in which vertical part 71' of a stationary knife 71 carried out the polymerization to the rear face of the movable cutting edge 73, and the left right translation of the movable cutting edge 73 insert in as a condition prevented by the guide member 74 prepared in right-and-left both sides, the press arm 75 is protruded upward on the both sides of the top chord of the rear-face version 69. The upper part of a stationary knife 71 is always ahead extruded with the extrusion force ahead of this press arm 75, and advice of suspension pin 67' which protruded on upside both the corners of flat \*\* 67 as back sense. Furthermore, cutter equipment 78 is constituted by establishing the longitudinal rectangle hole 77 for the oblong guide hole 76 in the central part of the lower part of the movable cutting edge 71 in the central part of the rear-face version 69, Furthermore On the outside of right-hand side standing wall 3', a control panel 83 and the wiring substrate 84 It prepares, respectively. To the control panel 83 concerned the millimeter unit setup key 85, the cm unit setup key 86, the setting-out dimension display counter 87, the setting-out dimension delivery directions carbon button 88, the free dimension stepper button 8, and the free dimension cutting carbon button 90 moreover -- while equipping the rear face of the above-mentioned seat disc 1 with a power cord 91 and the power-source close end switch 93 and equipping the wiring substrate 84 with a transformer 94 for electric inhibition 91 --, such as a resistor, a capacitor, and a semiconductor device, at the medium bottom 4 bottom, respectively \*\*\*\*\* rare \*\*\*\*\* 96 is fixed to the revolving shaft 15 of the above-mentioned motor 14 for delivery for the magnet 95 of a periphery small to one point. Moreover, a sensor 97 is attached in a rotor plate 96 and the part which counters in the wiring substrate 84. Add push actuation to the setting-out dimension delivery directions carbon button 88, and delivery is sometimes started. When \*\*\*\* by which it was indicated by setting out is in agreement with the count and the setting-out dimension display counter 87 at which a magnet 95 passes through a sensor 97 front by this initiation, while stopping delivery, the movable cutting edge 73 a cutting function by actuation of the motor 59 for cutter actuation Nothing, Moreover, while adding push actuation to the free dimension stepper button 89, when delivery is continued and push actuation is further added to the free dimension cutting carbon button 89, an electrical circuit (not shown) is formed so that the movable cutting edge 73 may make a cutting function. In addition, in 99 in drawing, a tie-down plate and 101 show the rib for a guide, and, as for outside \*\* and 100, 102 shows the notch for adhesion prevention.

#### (Operation)

The above-mentioned example \*\*\*\* millimeter unit setup key 85 and the above-mentioned cm unit setup key 86 are operated. After expressing desired \*\*\*\* at the setting-out dimension display counter 87, actuation is added to the setting-out dimension delivery directions carbon button 88. If it \*\*\*\*, while carrying out counting of the count of passage of a magnet 95, a rotor plate 96 by the revolution sensor 97 by the motor 14 for delivery starting a revolution The motor 14 for the said delivery makes a revolution condition a drive pinion 16, intermediate gears 17, 18, 19, and 20, the transfer gearing 13, collar gears 11 and 12, and the order both-sides delivery rolls 9 and 10. Adhesive tape 5 The start of delivery, It continues until it suspends the motor 14 for delivery by coincidence with \*\*\*\* according this delivery to counting of the above [ an electrical circuit ], and the number \*\* of expressions by the setting-out dimension display counter 87. Immediately after this halt, this electrical circuit directs a revolution of the motor 59 for cutter actuation, and makes a revolution condition a pinion 61, intermediate gears 62, 63, 64, and 65, and the major-diameter spur gear 56. When it \*\*\*\*, a crank pin 55 makes the vertical splash plate 48 rock up in contact with a cam 51. While a guide pin 52 goes up the movable cutting edge 73 with an upper part splash and cutting adhesive tape 5 by the stationary knife 71, a crank pin 55 cooperates with a cam 51 and the towage spring 50, and the vertical splash plate 48 is made to rock caudad. An electrical circuit suspends the cutter actuation motor 59 at the same time a guide pin 52 returns the movable cutting edge 73 to a downward location with this lower part splash. The direction for use which starts the tape piece of the die length which is equivalent to the setting-out dimension display counter 87 in \*\* at the number \*\* of \*\*\*\*\*, moreover By adding push actuation to the free dimension stepper button 89, and making the motor 14 for delivery, a drive pinion 16, intermediate gears 17, 18, 19, and 20, the transfer gearing 13, collar gears 11 and 13, and the order both-sides delivery rolls 9 and 10 into a revolution condition After continuing sending adhesive tape 5 to arbitration to the desired die length, while canceling the push actuation to the free dimension stepper button 89 and stopping delivery of the adhesive tape 5 concerned, push actuation is added to the free dimension cutting carbon button 90. If it \*\*\*\*, the motor 59 for cutter actuation will make the movable cutting edge 73 restored once up and down, and will suspend it, and it is made to present the direction for use which starts the tape piece of the free die length which the above continued sending as \*\* and was sent out by actuation.

#### (Effectiveness of a design)

As this design falling the putt 105 made from the felt the space 104 of long underside disconnection was horizontally formed in the upper part part between the rear-face version 69 of flat \*\* 67, and a front wall like the above statement, and occlusion of the lubricating oil was carried out [ putt ] to this space 104 out and being impossible Load and it is made for the cutting edge 72 of the movable cutting edge 73 to contact this putt 105 by lifting by the guide pin 52 of this movable cutting edge 73. Since a lubricating oil is received from putt 106 whenever the cutting edge 72 of the movable cutting edge 73 is cutting actuation, and some carrier beam lubricating oils were moved to the movable cutting edge 73 by this actuation at the cutting edge 70 of a stationary knife 71 Although it is [ that it can prevent the adhesion to the cutting edges 70 and 72 of the margo incisalis of the adhesive tape which the cutting edge 72 of the movable cutting edge 73 and the cutting edge 70 of a stationary knife 71 were covered with the lubricating oil, and described them above, and with / to the cutting edges 70 and 72 of the dregs of a binder / the prostration ] natural Furthermore, in this design, the press arm 75 is protruded upward on the both sides of the top chord of the rear-face version 69. Since it constituted as the direction on a stationary knife 71 was always ahead extruded with the thrust ahead of this press arm 75, and advice of suspension pin 67' which protruded on upside both the corners of flat \*\* 67 as back sense A stationary knife 71 can maintain the aforementioned putt 106 and an always positive contact condition. The movable cutting edge 73 which carries out Rin ON at every tape cutting for celebration among both not only can fully receive adhesion of the lubricating oil to a cutting edge 72 by this, but junction to this stationary knife 71 of the movable cutting edge 73 will be performed very densely by the extrusion force ahead of the press arm 75 to a stationary knife 71. It is what can much more ensure the cut of the tape by cutting edges 70 and 72. this -- both -- Moreover, the synthetic resin which was excellent in non-adhesiveness in this design at the top-face and lateral surface of a lower edge part of a delivery 68, The coat sheets 108 made from an ingredient, such as rubber, are put. To the outside surface of this covering sheet 108 the pinstriped irregularity 109 Moreover, since the columna-nasi-like ridge 110 was formed in the outside surface of the central part of the part put on the lateral surface of the lower edge part of a delivery 68 in this outside surface, respectively That the sent-out adhesive tape is carelessly tired from the top face and lateral surface of a lower edge part of this delivery 68, and is attached to them from a delivery 68 The non-adhesiveness of the coat sheet 108, It is avoided by existence of irregularity 109 and a ridge 110, and this design does so the effectiveness which can fully solve the aforementioned trouble by these.

[Translation done.]

\* NOTICES \*

JPO and NCIP are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

DESCRIPTION OF DRAWINGS

---

[Brief Description of the Drawings]

the part which drawing shows the example of this design and looked at drawing 1 from front slant -- the part which looked at a \*\*\*\* perspective view and drawing 2 from back slant -- similarly the perspective view as which a \*\*\*\* perspective view and drawing 3 looked at the \*\*\*\* side elevation, and a part of drawing [ a part of ] 4 looked at a \*\*\*\* front view and drawing 5 from the side front of cutter equipment, the perspective view which similarly looked at drawing 6 from the background, and drawing 7 are decomposition perspective views. 1 [ -- A right-hand side standing wall, 4 / -- Medium bottom, ] -- A seat disc, 2 -- A before side standing wall, 3 -- A left-hand side standing wall, 3' 5 [ -- Sending-out opening, 8 / -- Concave, ] -- Adhesive tape, 5' .... A winding core, 6 -- A loading crevice, 7 9 -- A before side delivery roll, 10 -- 11 A backside delivery roll, 12 -- Collar gear, 13 [ -- Drive pinion, ] -- A transfer gearing, 14 -- The motor for delivery, 15 -- A revolving shaft, 16 17, 18, 19, 20 [ -- The knob for press on-the-strength accommodation, ] -- An intermediate gear, 21 -- An overhang wall, 22 -- An axis of ordinate, 23 24 [ -- A long hole, 28 / -- Medial axis, ] -- A side, 25 -- A concave, 26 -- A \*\* arrival roll, 27 29 29' [ -- Height section, ] -- The bending section, 30 -- The spring for depressions, 31 -- A sideways pin, 32